

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-11 (canceled)

12. (new) A composition for treatment of symptoms of psoriasis comprising at least one immunogenic polypeptide and fragments thereof isolated from the particulate fraction of at least one protozoan of genus leishmania, wherein the at least one immunogenic polypeptide inhibits inflammation associated with psoriasis, and wherein the apparent molecular weights of the immunogenic polypeptides in the composition after total reduction and alkylation are 82kD, 80kD and 73kD.

13. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 1 and immunogenic variants of SEQ. ID NO: 1.

14. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 2 and immunogenic variants of SEQ. ID NO: 2.

15. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 3 and immunogenic variants of SEQ. ID NO: 3.

16. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 4 and immunogenic variants of SEQ. ID NO: 4.

17. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 5 and immunogenic variants of SEQ. ID NO: 5.

18. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 6 and immunogenic variants of SEQ. ID NO: 6.

19. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 7 and immunogenic variants of SEQ. ID NO: 7.

20. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 8 and immunogenic variants of SEQ. ID NO: 8.

21. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 9 and immunogenic variants of SEQ. ID NO: 9.

22. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 10 and immunogenic variants of SEQ. ID NO: 10.

23. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 11 and immunogenic variants of SEQ. ID NO: 11.

24. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 12 and immunogenic variants of SEQ. ID NO: 12.

25. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 13 and immunogenic variants of SEQ. ID NO: 13.

26. (new) The composition of claim 12, comprising at least one immunogenic polypeptide having SEQ. ID NO: 14 and immunogenic variants of SEQ. ID NO: 14

27. (new) The composition according to claim 12, wherein the at least one immunogenic polypeptide is isolated from at least one leishmania species selected from the group consisting of *L.(L) amazonensis*, *L.(L) venezuelensis*, *L.(V) brasiliensis*, *L.(L) chagasi*, *L.(L) donovani*, *L.(L) infantum*, *L.(L) major*, *L.(L) panamensis*, *L.(L) tropica* and *L.(L) guyanensis*.

28. (new) The composition according to claim 12, wherein the at least one immunogenic polypeptide is isolated from a mixture of *L.(L) amazonensis*, *L.(L) venezuelensis*, *L.(V) brasiliensis*, and *L.(L) chagasi*.

29. (new) The composition according to claim 12, wherein the 73 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (b) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14.

30. The composition according to claim 12, wherein the 80 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 4; or
- (b) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10.

31. The composition according to claim 12, wherein the 82 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1 and SEQ ID NO: 2; or
- (b) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

32. (new) The composition according to claim 12, wherein the composition comprises

(a) at least one 73 kDa polypeptide comprising the amino acid sequence set forth as:

- (i) SEQ ID NOS: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (ii) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14;

(b) at least one 80 kDa polypeptide comprising the amino acid sequence set forth as:

- (i) SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4; or
- (ii) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10; and
- (c) at least one 82 kDa polypeptide comprising the amino acid sequence set

forth as:

- (i) SEQ ID NO: 1 and SEQ ID NO: 2; or
- (ii) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

33. (new) A method of eliciting an immune response in an animal, including a human, for treatment of the symptoms of psoriasis, comprising introducing into the animal a composition comprising at least one immunogenic polypeptide and fragments thereof isolated from a particulate fraction of at least one protozoan of genus leishmania, wherein the at least one immunogenic polypeptide inhibits inflammation associated with psoriasis, and wherein the apparent molecular weights of the immunogenic polypeptides in the composition after total reduction and alkylation are 82kD, 80kD and 73kD.

34. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 1 and immunogenic variants of SEQ. ID NO: 1.

35. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 2 and immunogenic variants of SEQ. ID NO: 2.

36. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 3 and immunogenic variants of SEQ. ID NO: 3.

37. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 4 and immunogenic variants of SEQ. ID NO: 4.

38. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 5 and immunogenic variants of SEQ. ID NO: 5.

39. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 6 and immunogenic variants of SEQ. ID NO: 6.

40. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 7 and immunogenic variants of SEQ. ID NO: 7.

41. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 8 and immunogenic variants of SEQ. ID NO: 8.

42. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 9 and immunogenic variants of SEQ. ID NO: 9.

43. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 10 and immunogenic variants of SEQ. ID NO: 10.

44. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 11 and immunogenic variants of SEQ. ID NO: 11.

45. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 12 and immunogenic variants of SEQ. ID NO: 12.

46. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 13 and immunogenic variants of SEQ. ID NO: 13.

47. (new) The method according to claim 33, wherein the composition comprises at least one immunogenic polypeptide having SEQ. ID NO: 14 and immunogenic variants of SEQ. ID NO: 14

48. (new) The method according to claim 37, wherein the immunogenic polypeptide is isolated from at least one leishmania species selected from the group consisting of *L.(L) amazonensis*, *L.(L) venezuelensis*, *L.(V) brasiliensis*, *L.(L) chagasi*, *L.(L) donovani*, *L.(L) infantum*, *L.(L) major*, *L.(L) panamensis*, *L.(L) tropica* and *L.(L) guyanensis*.

49. (new) The method according to claim 37, wherein the immunogenic polypeptide is isolated from *L.(L) amazonensis*, *L.(L) venezuelensis*, *L.(V) brasiliensis*, and *L.(L) chagasi*.

50. (new) The method according to claim 37, further comprising the step of evaluating whether the animal, including humans, should undergo immunotherapy with the composition.

51. (new) The method according to claim 37, wherein the 73 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (b) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14.

52. The method according to claim 37, wherein the 80 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 4; or
- (b) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10.

53. (new) The method according to claim 37, wherein the 82 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1 and SEQ ID NO: 2; or
- (b) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

54. (new) The method according to claim 26, wherein the composition comprises

(a) at least one 73 kDa polypeptide comprising the amino acid sequence set forth as:

- (i) SEQ ID NOS: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (ii) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14;

(b) at least one 80 kDa polypeptide comprising the amino acid sequence set forth as:

- (i) SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4; or
- (ii) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10; and

(c) at least one 82 kDa polypeptide comprising the amino acid sequence set forth as:

- (i) SEQ ID NO: 1 and SEQ ID NO: 2; or
- (ii) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.